

abundant gathering to many gleaners. One branch of the subject I have barely touched, the superstitious practices attaching to many of our wild plants, though not surviving in their names. I have left alone the interesting question of Bible plants, of the hyssop, the juniper, the mustard-seed, the lilies of the field, the burning bush, the shittah, the almug, the gopher, the curiously mistranslated cab of dove's dung, with the light thrown upon their identity by the names given to them in the commentaries in our older translations. Nor can I do more than hint at the rich store of literary allusion to our wild flowers which abounds in all English poets, and the beautiful thoughts suggested to many of them by some particular plant. I should have liked to read you Chaucer's lines upon the daisy, Herrick's on the daffodil, Burns's on the dog-rose, Shelley's on the sensitive plant, Southey's on the holly, Wordsworth's on the lesser celandine, Longfellow's on the compass-plant. I should like to open volume after volume of Elizabethan and of later days; to enumerate and discuss the flowers with which Ben Jonson bids us "Strew, strew the smiling ground;" the "pretty paunce and chevisaunce," of Spenser; the "quaint enamelled eyes" that decked the laureate hearse of Lycidas; "the silver globes of guelder rose" which won the heart of Cowper; the "hawthorn bush beneath the shade" of Goldsmith's lovers; the "slight hairbell" which raised its head, uncrushed by the airy tread of Ellen Douglas. I should like to remind you of the lessons in natural theology which Paley drew from the "little spiral body" of the dodder seed; of the star-shaped shadow of the daisy which Archer Butler showed to Wordsworth, or how Linnaeus, when he first saw the wild broom in flower,

"Knelt before it on the sod,
For its beauty thanking God."

Above all I should love to turn with you the page of Shakespeare; to read of the grey disrowned head of Lear wreathed with "rank fumiters and furrow weeds;" of Perdita at the shearing feast disparaging the streaked gilliflowers as Nature's bastards; of poor distraught Ophelia distributing her rosemary and herb of grace; of Puck telling how love in idleness was purpled with love's wound; of Titania gently entwining the "female ivy and sweet honeysuckle" round the sleek smooth ass's head of Bottom; of Helena and Hermia, "a double cherry seeming parted, two lovely berries moulded on one stem." For I should lay on you a spell mightier than I can forge myself; I should invoke allies before whom we all bow as the source of our intellectual happiness and growth; I should remind you how the most creative minds have drawn nutriment from these tenants of our hedgerows and hill-sides, and how the knowledge of their lore helps us in its turn to interpret the sweet thoughts and apt illustrations of the poets they inspired and delighted: how, if the aspirations of my Cambridge botanist were fulfilled; if the daisy could become the *bellis*, the strawberry the *fragaria*, the honeysuckle the *caprifolium*, the heather the *calluna*, the parting genius of romance and myth and association and folklore would be sent sighing from the domain of botany; and the richest and most attractive of the natural sciences would become the dullest and the most neutral.

In conclusion, let me disclaim all merit of originality in the ideas which have been put before you to-night. I have but attempted to bring together, with the interest attaching to cumulative illustration, conjectures which have been started and discoveries which have been worked out by others. Scattered through the old-fashioned tomes of Coles, Lyte, Parkinson; through the pleasant pages of Loudon, Pratt, Johns; above all in that most valuable work on popular botany which we owe to our Somersetshire naturalist, Dr. Prior, you will find all or nearly all that I have advanced. The flowers were plucked by other hands; mine has been only the *pia dextera* to sort and wreath them.

NOTES

WE greatly regret to record the death of Mr. J. P. Gassiot, D.C.L., F.R.S., which took place on the 15th inst., the opening day of the Plymouth meeting of the British Association, at the age of upwards of eighty years. Sir Wm. Thomson referred to Mr. Gassiot at the concluding meeting of the Physical Section in terms of the highest appreciation. His experiments with the vacuum tubes, an account of which will be found in the

Royal Society's publications, extended over many years, and he varied them in very many ways, in order to throw light on the theory of the stratified discharge. Mr. Justice Grove worked a great deal with Mr. Gassiot, who continuously for many years experimented with a battery of high potential, beginning with a battery of 500 water, and ending with 3,500 *Leclanché* cells. He spared no expense or trouble in his own researches, and in making known to Englishmen the researches of continental physicists by the purchase of similar apparatus to that they had employed. At his scientific gatherings one met the eminent men of all nations, and in the early days of the British Association they generally assembled after the meetings at Clapham Common. Before his death he distributed the greater part of his apparatus; much of it was given to the Cowper Street Middle Class School, and his vacuum tubes (in very great numbers) to Mr. Spottiswoode. He was a generous patron of science, and a helper of scientific men. He has munificently endowed the Kew Observatory and the Cowper Street Middle Class School, and was the founder of the Royal Society Scientific Relief Fund. His untiring activity enabled him to take an active part in the administration of some of the largest public companies, and though in years he lived a very long life, by his activity he may be said to have lived twice as long. He was the intimate friend of Faraday, and most men of eminence in England and abroad; those living will recall, when they hear of his death, the many pleasant and profitable hours spent at Clapham Common.

WE learn from a correspondent in Alexandria, under date August 12, that the obelisk is now nearly quite inclosed in its iron casing, and its launch may take place in another fortnight or so. "It is now receiving an outer skin of strong thick planks, to protect the casing from injury when it is rolled down the inclined plane into the sea. Two delicate engineering operations have to be got over before it is ready for the launch. The first is to let down the obelisk on to its bed in the cylinder, and, that accomplished, to complete the riveting of the lower plates, and then let the whole down on to the ground; for at present the obelisk and cylinders are supported above the ground independent of one another. There will be no ceremony at the launch as the state of the sea may prevent the operation at any fixed time; and a calm day will have to be selected. The *steamer* will take place when it is ready for sea after being docked in the Great Harbour. It has yet to have a rudder and bilge keels fitted, besides the cabin, wooden deck, mast, sail, &c. It will be painted bright-red and bear the name of "Cleopatra." If met at sea, it may be taken for a torpedo boat, and avoided accordingly. One side, the part which remained undermost, is in beautiful preservation, but other sides are more or less eroded; [still, when erected and seen at a distance the hieroglyphs will probably appear more sharply defined than when seen close and in a prostrate position."

PROF. E. S. MORSE, of Salem, Mass., is now busy with dredge and microscope in Japan, having fixed his headquarters at Inoshima, seventeen miles south of Yokohama. Recently he ascended one of the highest of the Japanese mountains, about 100 miles from the coast, and found opportunity there for dredging Lake Chiussenji, a body of water 4,000 feet above sea level. Its fauna was ascertained to be quite peculiar. Prof. Morse will return to the United States in time for his usual courses of lectures during the coming autumn and winter; but afterwards, in 1878, he expects to go back to Japan, having accepted an engagement in the Imperial University of Tokio, as professor of biology. He has also projected a summer school of natural history, to be conducted on the coast near the university; his text-book for beginners in zoology is to be translated into the language of Japan, and animals native to that country are to be

substituted for the American ones referred to throughout the volume.

THE *New York Tribune* tells us of a practical application of the telephone. Mr. J. L. Haigh, the contractor for manufacturing the wire for the Brooklyn Bridge, put up a telephone a short time ago, connecting his establishment with the Bridge Superintendent's office. Mr. Cheever, the agent for the telephone in the United States, has lately placed in New York several telephone instruments and wires. One of these connects his office with the Champion Burglar Alarm Company's office at Thirteenth Street and Broadway, using one of their old telegraph-wires, between three and four miles in length, as the medium of communication. Mr. Cheever has another wire running to Broad Street, in communication with an establishment engaged in the construction of telegraph lines. Mr. Cheever is erecting a line for the Clyde Steamship Company from its office in Bowling Green to Pier No. 2, North River, from which its steamships sail. This is a circuitous line, about five miles in length. The piers of the Brooklyn Bridge are also being connected by telephones with the superintendent's office, so that all the movements of the "travellers" in carrying the wires across from pier to pier can be communicated and directed without the use of signal-flags as heretofore. The current of sound in these telephones is carried by a single wire in either direction. All that it is possible to do in ordinary conversation between two people sitting within two feet of each other in a room can be done at the distance of five or ten miles, or even a greater distance, by simply raising the voice and speaking a little slower than naturally. The telephone instruments themselves are very simple, consisting of two wooden tubes, one of which is placed at the mouth, the other at the ear. The extension of these telephones all over the city in place of the electric telegraph is probabily only a question of time.

FROM the *New York Tribune* we learn that the first act of the new College Administration at Amherst has been the purchase of all the Shepard Scientific Collections located in the college cabinets. These collections, the private property of Prof. C. U. Shepard, were removed from New-Haven to Amherst in 1847, through the influence of Prof. Hitchcock, and have remained there ever since, receiving constant personal attention from the Professor, and from the College such enlarged accommodations as their growth required. The purchase has been made for 40,000 dollars, or less than half the appraised value of the minerals, the College thereby securing for itself not only all the material necessary for study in this department, but also, to use the Professor's own words, a collection "which, besides being the largest ever formed by one individual, is actually the best now possessed by any college or university in this country or in Europe." The collections are three in number: viz., a mineralogical, a geological, and a meteoric. Of these the first is the most important and perfect, containing specimens illustrative of almost all the species of the twenty-two orders, selected with the utmost skill and appreciation of scientific beauty. The meteoric collection is the fourth for size and value in the world, the three others which outrank it being those of the national museums at London, Vienna, and Paris.

PROF. PIAZZI SMYTH sends to the *Edinburgh Courant* a memorandum from the Edinburgh Royal Observatory, dated at 2 P.M. August 21, in which he states that the 24-hour period then closed had witnessed by far the heaviest rainfall ever recorded there within an equal interval of time, having amounted to no less than 1.940 inches. "This particular storm," the memorandum states, "which has been marked throughout by a heavy rain-band in the prismatic spectrum of the daylight, though by no particular fall of the barometer, commenced on August 17 with a veering of the wind from the west towards the east by

way of the north, in which easterly position it settled for the four following days, or up to this time, when it has now gone back by the north to the west, and the depths of rain found in the rain-gauge each day have been thus:—

August 18	...	...	...	...	...	in.
August 19	...	...	...	...	...	0.177
August 20	...	...	...	...	...	1.349
August 21	...	...	...	...	...	0.794
August 21	...	...	...	...	...	1.940

making a total of 4.260 inches in four days; in a climatic position, too, viz., the roof of this observatory, where the mean monthly fall throughout the year is only 2.091 inches."

It is worthy of note in connection with the present exceptionally wet weather in this country that the rainfall in Victoria this season has been below the average, and the weather cold.

A SEVERE shock of earthquake was felt in Melbourne on June 25, at 3.30 A.M.

As already announced, the fiftieth meeting of German naturalists and physicians will take place at Munich on September 17-22. Among the visitors who have announced their intention to read papers, are Professors Wald-eyer (Strasbourg), Ernst Haeckel (Jena), Tschermak (Vienna), Kiebs (Prague), Dr. G. Neumayer (Director of the German Observatory, Hamburg), Virchow (Berlin), Dr. Avé Lallemand (Lübeck), and Günther (Anspach).

THE British Archæological Association commenced its annual meeting at Llangollen on Monday, under the presidency of Sir Watkins Williams Wynn, M.P.

THE first annual meeting held in Scotland of the Institute of Naval Architects was opened at Glasgow on Tuesday morning, when the members were received in the Corporation Galleries by the Lord Provost. Lord Hampton, the president, spoke of the immense amount of shipbuilding carried on in Glasgow. Papers were read "On Transverse Strains in Ships," by Mr. W. John, and on "Abnormal Influences in the Direct Motion of Steam-Vessels," by Mr. Robert Mansel. The members in the afternoon visited several of the shipbuilding yards in the neighbourhood.

THERE have been just added to the South Kensington Museum six models illustrating the cliff houses, cave dwellings, and lowland settlements met with through the district where the States of Utah, Colorado, Arizona, and New Mexico join. A series of models of the same kind was shown at the Philadelphia Exhibition, and through Sir Herbert Sandford these six have been generously presented by the United States' Government to this country. They are reduced to different scales, the cave dwellings being of smaller scale than the lowland dwellings, since with the former the surroundings are given, while with the latter they are not.

THE Archæological Congress at Kazan was opened on August 12, and will continue its sittings during three weeks. The Congress is divided into seven sections, one of which deals with pre-historic man. The questions to be discussed are of great interest, as well as the very varied archæological exhibition opened in connection with the Congress. Several excursions will be made by the archæologists along the banks of the Volga, and during one of these a *koorgan* (mound) will be excavated.

As we have already announced, the Sanitary Institute of Great Britain will hold its Autumn Congress at Leamington from October 3 to 6. The president will be Dr. B. W. Richardson, who will open the Congress with an address on the evening of the 3rd. Other addresses will be given on the 4th and 5th, and among other papers to be read will be one by Surgeon-Major de Chaumont on "The Effects of Climate upon Health," by Mr.

W. Eassie, C.E., on "The Influence of Vegetation on Human Health," and by Mr. A. Haviland on "Geography of Disease in Relation to Sanitary Science." There will be an exhibition of sanitary apparatus, appliances, and articles of domestic use and economy, in the Drill Hall, Leamington, from October 3 to 18, in connection with the Congress.

RUSSIAN papers announce the return to Kuldja of Col. Prshevsky. He has brought with him very interesting zoological collections, the most important of them being the skins of three wild camels.

PROF. WAGNER is engaged now in the organisation of zoological stations on the White Sea. One of these will be organised on the shore of the Anzerski Strait, the other on Cape Orlovsky, and the third on the Sviatoi Nos.

MESSRS. W. AND A. K. JOHNSTON have published a small pamphlet from the pen of Dr. Andrew Wilson, on the Colorado beetle (*Doryphora decemlineata*), with an excellent and much magnified coloured representation of the insect, and another of *Doryphora juncta*, "the Bogus potato-bug" of the colonists. An account is given of the structure and habits of the species, together with the most successful methods that have been employed for its destruction. Why *D. juncta* is depicted on the outside of the paper with the heading "The Colorado Potato Beetle" just above it, we are at a loss to comprehend. It is misleading, to say the least. We have also received from Messrs. Routledge a reprint from one of the Reports of Mr. C. V. Riley, the State Entomologist of Missouri, on the Colorado beetle, and from Mr. Stollwerck, of Cannon Street, a very successful model of the beetle at its various stages in a neat little case. The model has been made by Stollwerck Brothers, of Cologne, by order of the German Government, and has been widely distributed all over the country, in schools, &c.

WE notice an interesting report, by M. Kamensky, on the cotton-tree culture in Turfan, read at the last meeting of the St. Petersburg Society for the Protection of Trade.

FROM the *Twenty-third Annual Report* of the Brighton and Sussex Natural History Society we are pleased to see that the society is in a state of continued prosperity. The report contains many papers read at the society's meeting, most of them scientific, and many of them interesting and valuable. An equally satisfactory account of progress is given in the *Ninth Annual Report* of the Eastbourne Natural History Society, which also contains a number of interesting papers read at the meetings.

WITH reference to Galileo's claim to be the inventor of the telescope, M. Wolf quotes (*Annalen der Physik und Chemie*) from a manuscript of Scheiner (1616) in a library in Zurich, a curious passage, of which the following is part: "It must be allowed first, considering what the telescope does, that Baptista Porta has better right to be thought the inventor, because he describes, after his own way, in obscure words and puzzling expressions, an instrument like the telescope. But secondly, if we speak of the telescope, as it is now used after general perfection, we must say that neither Porta nor Galileo is the first discoverer of it, but the telescope in this sense was discovered in Germany, among the Belgians, and that accidentally by one Krämer, who sold spectacles, and either for amusement, or experimentation, combined concave and convex glasses, so that with both glasses he could see a quite small and distant object large and near; at which success being rejoiced, he united several similar pairs of glasses in a tube, and offered the combination at a high price to wealthy people. Thereafter they (the telescopes) became gradually more common among the people, and spread to other countries. In this way two of them were brought for the first time by a Belgian merchant to Italy; of these, one remained long in the college at Rome; the other

went first to Venice, later to Naples; and here the Italians, and especially Galileo, at that time Professor of Mathematics in Padua, took the opportunity of improving it, in order to apply it to astronomical purposes, and extend its use further. Thus the telescope, as we have it to-day, was discovered by Germany, and perfected by Italy; the whole world now rejoices in it."

EXPERIMENTS have recently been made at Dortmund, on the Cologne-Minden Railway, with a newly-invented steam-brake, and on the whole they were crowned with success. A railway train travelling at full speed was brought to a standstill in the remarkably short time of twenty seconds, and the inventor is confident to be able to reduce this time to eighteen seconds.

WE have received the programme of the St. Thomas Charter-house School of Science for session 1877-8, which commences on September 29. It is as well arranged as before, and we notice that another series of Gilchrist Lectures will be given this winter, by Dr. B. W. Richardson, on physiology. One of the subjects to be taught this session is "advanced and elementary physiography."

THE *New York Tribune* of August 10 and 11 devotes about six columns, with illustrations, to a description of the contents of the Peabody Museum, Yale College. Why does not some enterprising English "daily" try, by a similar experiment, whether the English public is ripe for such reading?

THE property of certain salts of cobalt (such as the chloride) to assume a blue colour in dry air and to change to pink during moist weather, has lately been utilised for ladies' hats and bonnets. An enterprising *marchand de toilettes* at Paris has added to his "nouveau-tés" artificial flowers covered with the salts in question, and christened them "barometers." "Hygrometers" would perhaps be more correct, but then the barometer is the old established weather prophet of the enlightened millions.

THE law deduced by Baer from observation on Russian rivers, regarding influence of the earth's rotation on the form of river banks and beds, has received confirmation by various observers since. The attention has been almost exclusively directed, however, to rivers flowing in meridian direction. And a like remark applies to investigations of the pressure arising from the earth's rotation on one of the rails in railways. In a recent paper to the Vienna Academy, M. Finger enlarges the problem beyond this and other limitations, studying the influence of the earth's rotation on movements (especially of rivers and winds) in any paths parallel to the *spheroidal* (not *spherical*) surface of the earth. One surprising result is, that even when the azimuth of the direction does not vary, the lateral pressure to the right is not (as the adherents of Baer's law suppose) greatest for a motion along the meridian, nor has it the value indicated by the law for all azimuths, but it depends on the value of the azimuth, and, with conditions otherwise equal, it is greatest for a motion towards the east, and least for a motion towards the west. With regard to vertical pressure of a body moving along the earth's surface, M. Finger finds that in consequence of the earth's rotation alone, even if the temperature and vapour conditions did not vary, there would be an influence of wind-direction on the state of the barometer, small, indeed, but in the case of strong winds by no means to be neglected, so that a higher barometer would correspond to the east winds, a lower to the west.

A REGISTERING "physiological balance" has recently been devised by M. Redier, at the instance of M. Grandea, for an agronomic station, its object being to represent in curves the gains or losses of weight of any matter (soil, plant, animal, &c.) placed in one of its scales. With three of these instruments

(one carrying bare soil, another a plant in the same soil exposed to air, and the third a similar plant, but with its stem passing up through a covering obturator), and with a dry and a wet registering thermometer, M. Grandeau hopes to be able to settle some important questions relating to quantity of water required by a given species, transpiration, quantity of evaporation from ground under various conditions, &c.

THE additions to the Zoological Society's Gardens during the past week include a Macaque Monkey (*Macacus cynomolgus*) from India, presented by Miss Gover; a Bonnet Monkey (*Macacus radiatus*) from India, presented by Mr. G. B. Southern; a Soemmerring's Antelope (*Gazella sammerringi*) from Abyssinia an Arabian Gazelle (*Gazella arabica*) from Arabia, presented by Capt. F. Cotton; an Emu (*Dromicus nova-hollandiæ*) from New South Wales, presented by Mr. F. Green; a Slender-billed Cockatoo (*Cacatua tenuirostris*) from South Australia, presented by Major M. Pasley, R.A.; Crested Ground Parrakeet (*Calopsitta nova-hollandiæ*) from Australia, presented by Mr. Salisbury Baxendale; a Purple-faced Monkey (*Sennopithecus leucoprymnus*) from Ceylon, deposited.

SCIENTIFIC SERIALS

Bulletin de l'Académie Royale des Sciences de Belgique, No. 3. On the pension-fund of widows of officers of the Belgian army, by M. Liagre.—Some curious examples of discontinuity in analysis (continued), by M. Plateau.—Reply to M. Terby's criticism on the map of Mars, published in the *Terres du Ciel*, by M. Flammarion.—Theorem on the Arquesians, by M. Saltel.—Applications of the method of analytical correspondence and of the law of decompositions to certain left curves, by the same.—Observations at Rome on the magnetic needle and the solar spots during 1875, by Abbé Spée.—Microscopic researches on the anatomy of the cochlea of mammalia, by M. Nuel.

No. 4.—On the theory of continuous periodic fractions, by M. Le Paige.—Studies on the planet Mars (10th notice) by M. Terbe.—Continuation of theorems on regular polygons, by M. Reynaud.—Fragment of tourmaliniferous rock from pudding-stone of Bonsalle, by MM. Poussin and Renard.

No. 5.—Application of the rhe-electrometer to the lightning-conductors of telegraphs, by M. Melsens.—Some remarks on the winter of 1876-77; periodicity of mild winters and hot summers, by M. Lancaster.—On subnormal polars and radii of curvature of plane lines, by M. Ghysens.—Morphology of the dental system of human races, by M. Lambert.—Stratigraphic arrangement of fossil seals collected in the strata of Antwerp, by M. Moulon.

SOCIETIES AND ACADEMIES

LONDON

Entomological Society, August 1.—Mr. J. W. Dunning, F.L.S., vice-president, in the chair.—Mr. Stevens exhibited specimens of *Teretrius picipes*, Fab., one of the *Histerida* taken on a fence at Norwood. He also remarked on the appearance of a second brood of *Colias Edusa*, of which he had observed several males.—Mr. F. Smith exhibited (on behalf of Dr. Bennett of Sydney, who was present at the meeting), a fine pair of the beautiful and rare *Eupholus Bennettii*, Gestro., from Yule Island, New Guinea. It had been described under that name in the *Annali di Mus. Civ. di Genova*, viii. 1876.—The secretary exhibited a specimen of an insect forwarded to him by Mr. Bewicke Blackburn, who stated that a large field of mangolds belonging to the Knight of Kerry, in the island of Valentia, had been totally destroyed by it. It was believed to be the larva of some Coleopterous insect, but in consequence of the imperfect condition of the specimen, it could not be determined.—Mr. R. A. Ogilvie forwarded (through Mr. Douglas), specimens of an insect found in great quantities in a jar of pickles (piccalilly), devouring the pieces of cauliflower in the jar. Prof. Westwood had pronounced them to be the dipterous *Drosophila cellaris*, an insect commonly found in cellars and cupboards, delighting in stale beer, wine, &c. In answer to a question asked by Mr. Ogilvie, he said that the eggs were laid in the pickle-jar,

and not in the cauliflowers before they were pickled.—Mr. Douglas also forwarded a letter from Mr. A. H. Swinton, of Guildford, inclosing a specimen of *Myrmica ruginodis*, which, on being placed under a wine glass, stationed itself near the rim, head downwards, and rapidly vibrating the abdomen, continued "an intense noise," resembling the spiracular piping of the dipterous, *Syrilla pipiens*.—Mr. Enock remarked that a specimen of a spider taken by himself at Hampstead, and exhibited at a previous meeting by Sir Sydney Saunders as *Atypus sulzeri* had been since submitted to the Rev. O. Pickard, Cambridge, who stated that it was certainly not *A. sulzeri*, but probably *A. beckii*, Cambridge, which he believed to be the same as *A. piceus*, Thorell, though he was not certain as the only specimen he had examined of *A. beckii* was a female, and until he could obtain the other sex, he could not give a decided opinion. He added that he would be glad if collectors in the Hampstead locality would search for the males during the next autumn and winter, as it would help him to clear up the difficulty as to the species. A discussion then took place with reference to the exhibition by Mr. Jenner Weir, at the last meeting, of a specimen of *Cicada montana*, which was reported to have been distinctly heard to stridulate, notwithstanding that the insect was a female, and also that the species was one of which even the males were not known to stridulate. Mr. Weir stated that he had, since the last meeting, again visited the New Forest, and had seen in the possession of Mr. James Gulliver two specimens of *C. montana*, and he was assured by Mr. Gulliver that the fact of it stridulating was well known to him, and that he was guided by the sound so made, in effecting the capture. Mr. Champion said that he himself had captured the insect, and had distinctly heard a loud buzzing noise, but whether that sound was caused by the males or females he could not say. Mr. Dunning considered that farther evidence was wanting to prove stridulation in the females.—The following papers were communicated, viz.: Notes on the new and rare species of *Sphingide* in the Museum of the Royal Dublin Society, with remarks on Mr. Butler's recent revision of the family, by W. F. Kirby.—Descriptions of new genera and species of *Cryptocéphalide*, by J. S. Baly.—Descriptions of new species of *Cleride*, by the Rev. H. S. Gorham.

GENEVA

Society of Physics and Natural History, May 3.—Prof. Plantamour gave the results of the determination of the difference of longitude between the observatory of Zurich and the geodetic stations of the Gâbris (Canton Appenzell), and of the Pfänder (Austrian Vorarlberg), at which he has worked with MM. R. Wolf and Oppolzer. The two last observers have had to guard against the influence of the electric register on the rate of their pendulum, which was sometimes affected to the extent of one-tenth of a second.—Prof. Plantamour also referred to a particular fact which has been manifested by the corresponding observations made by him at Geneva, and by Col. Orffat Munich, and where the instants marked are influenced by the inclination to right or left of the head of the observer, according to the position he must take to apply his eye to the telescope. There is here a physiological or psychological phenomenon which deserves attention.

VIENNA

Imperial Academy of Sciences, June 14.—Action of bromine on phloroglucin, by M. Benedikt.—On the means of acid formation in the animal system, and on some phenomena of blood-serum, by M. Maly.—A new proof of Pohlke's fundamental proposition, by M. Pelz.—On a proposition relating to the theory of the higher equations, and on development of the root expression of a quadratic equation, by M. Zimels.—Testing of a method for determination of the water in silicates, by M. Sipöcz.—On formation of pimelin acid in action of a mixture of hydroxide and cyanide of potassium on bromide of amylene, by M. Bauer. The Coelenterata, Echinodermata, and Worms of the Austro-Hungarian North Polar Expedition, by M. Marenzeller.—On the spots in the xylema of leafy and resinous trees, by M. Kreuz.

June 21.—Orthoptera of Senegal, by M. Krauss.—On the probable connection of the wind with the period of sun-spots, by M. Hornstein.—On the determination of the value of a circle by an immediate method, by M. Georgievicz.—Observations on the nerves of the cornea and their vessels, by M. Königstein.—On the influence of the earth's rotation on the movements of any kind parallel to the earth's spheroidal surface, especially the currents of rivers and winds, by M. Finger.